

**Windows®. Life without Walls™.**  
**Fujitsu recommends Windows 7.**

# DATA SHEET

## FUJITSU ESPRIMO P7936 E-STAR 5.0 DESKTOP PC

### THE EXPANDABLE BUSINESS WORKHORSE

#### ESPRIMO P7936 E-STAR 5.0

The ESPRIMO P7936 E-Star 5.0 equipped with state-of-the-art Intel® chip and processor technology is the ideal partner for all your demanding business applications. Produced with selected material and equipped with comprehensive powersave options and energy-saving management, the ESPRIMO microtower PC today already meets the environment requirements of tomorrow. With extended system management functions, intelligent hardware design, extensive tests and a lifecycle of up to 18 months, the high performance levels of this PC meet every requirement. Furthermore, this microtower, equipped with a power supply with up to 87% efficiency, meets ENERGY STAR® 5.0 certification requirements.

#### MICROTOWER

Maximum performance and optimal extendability

- Top-quality, high-value microtower, 6 drive bays, 4 PCI/PCI express interfaces

#### ENVIRONMENTALLY COMPATIBLE PRODUCT

Your contribution to environmental protection for the continued existence of our planet

- Halogen-free mainboard, sophisticated product concept for the entire lifecycle

#### SILENT OPERATION

Pleasant working environment due to an extremely quiet system

- Innovative hardware design, optimized fan concept

#### SYSTEM MANAGEMENT

Easy system administration for complex IT infrastructure

- Intel® vPro™ technology

#### ENERGY STAR® 5.0

Low power consumption and low costs, without any loss in performance.

- Power supply with up to 87% efficiency



# COMPONENTS

## PROCESSOR

Intel® Core™2 Quad processor Q9650 (4 Cores / 4 Threads, 3.0 GHz, 12 MB, 1333 MHz)
Intel® Core™2 Quad processor Q9550 (4 Cores / 4 Threads, 2.83 GHz, 12 MB, 1333 MHz)
Intel® Core™2 Quad processor Q9505 (4 Cores / 4 Threads, 2.83 GHz, 6 MB, 1333 MHz)
Intel® Core™2 Quad processor Q8300 (4 Cores / 4 Threads, 2.5 GHz, 4 MB, 1333 MHz)
Intel® Core™2 Duo processor E8600 (2 Cores / 2 Threads, 3.33 GHz, 6 MB, 1333 MHz)
Intel® Core™2 Duo processor E8500 (2 Cores / 2 Threads, 3.16 GHz, 6 MB, 1333 MHz)
Intel® Core™2 Duo processor E8400 (2 Cores / 2 Threads, 3.0 GHz, 6 MB, 1333 MHz)
Intel® Core™2 Duo processor E7600 (2 Cores / 2 Threads, 3.06 GHz, 3 MB, 1066 MHz)
Intel® Core™2 Duo processor E7500 (2 Cores / 2 Threads, 2.93 GHz, 3 MB, 1066 MHz)
Intel® Pentium® processor E6600 (2 Cores / 2 Threads, 3.06 GHz, 2 MB, 1066 MHz)
Intel® Pentium® processor E5800 (2 Cores / 2 Threads, 3.2 GHz, 2 MB, 800 MHz)
Intel® Pentium® processor E5700 (2 Cores / 2 Threads, 3.0 GHz, 2 MB, 800 MHz)
Intel® Pentium® processor E5500 (2 Cores / 2 Threads, 2.8 GHz, 2 MB, 800 MHz)
Intel® Pentium® processor E5400 (2 Cores / 2 Threads, 2.7 GHz, 2 MB, 800 MHz)
Intel® Celeron® processor E3400 (2 Cores / 2 Threads, 2.6 GHz, 1 MB, 800 MHz)
Intel® Celeron® processor E3200 (2 Cores / 2 Threads, 2.4 GHz, 1 MB, 800 MHz)

## OPERATING SYSTEM

### Operating system optional preinstalled

Genuine Windows® 7 Home Basic (EM) 32-bit
Genuine Windows® 7 Home Premium 64-bit
Genuine Windows® 7 Professional 32-bit
Genuine Windows® 7 Professional 64-bit

### Operating system compatible

openSUSE Linux
Genuine Windows Vista®
Genuine Windows® XP

### Operating system notes

Dependent on configuration Windows 7® versions are:
Microsoft Office 2007 ready
Microsoft Office 2010 preloaded. Purchase a Product Key to activate a full Microsoft Office 2010 suite.
Limited Windows XP support. Microsoft discontinued Windows XP certification on system level.

## MEMORY MODULES

1 GB (1 module(s) 1 GB) DDR3, unbuffered, non-ECC, 1066 MHz, PC3-8500, DIMM
2 GB (1 module(s) 2 GB) DDR3, unbuffered, non-ECC, 1066 MHz, PC3-8500, DIMM
4 GB (1 module(s) 4 GB) DDR3, unbuffered, non-ECC, 1066 MHz, PC3-8500, DIMM

## HARD DISK DRIVES (INTERNAL)

SSD SATA, 128 GB, 2.5-inch
SATA II, 7200 rpm, 1000 GB, 3.5-inch, S.M.A.R.T.
SATA II, 7200 rpm, 500 GB, 3.5-inch, S.M.A.R.T. business critical
SATA II, 7200 rpm, 500 GB, 3.5-inch, S.M.A.R.T.
SATA II, 7200 rpm, 320 GB, 3.5-inch, S.M.A.R.T.
SATA II, 7200 rpm, 250 GB, 3.5-inch, S.M.A.R.T.
SATA II, 7200 rpm, 160 GB, 2.5-inch, S.M.A.R.T.

### Hard disk notes

Supporting NCQ and 3 GBit
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## GRAPHICS ADD ON CARDS (OPTIONAL)

ATI Radeon® HD 5450, 512 MB
DP to DVI-D (single link) Adapter Cable
DVI-D + DisplayPort Extension Adapter
DVI Extension Adapter
NVIDIA® GeForce® 9300GE, 512 MB
NVIDIA® GeForce® 9300GE display port low profile, 512 MB
NVIDIA® GeForce® 9500GS, 512 MB
NVIDIA® Quadro® NVS 290, 256 MB

<b>DRIVES (OPTIONAL)</b>	1.44 MB Floppy
	Blu-ray Disc™ Triple Writer
	DVD-ROM
	DVD Super Multi
	MultiCard Reader 20in1, 3.5-Inch
<b>INTERFACE ADD ON CARDS/COMPONENTS (OPTIONAL)</b>	
	Parallel Interface
	FireWire PCI-Card IEEE1394
	eSATA Interface
	Dual serial card PCI
<b>Base unit</b>	ESPRIMO P7936 E-Star5
<b>MAINBOARD</b>	
<b>Mainboard type</b>	D3012
<b>Formfactor</b>	µBTX
<b>Chipset</b>	Intel® Q45
<b>Processor socket</b>	LGA 775
<b>Processor quantity maximum</b>	1
<b>System bus (FSB / HT / QPI)</b>	up to 1333 MHz
<b>Memory slots</b>	4 DIMM (DDR3)
<b>Supported capacity RAM (max.)</b>	16 GB
<b>Memory frequency</b>	1066 MHz
<b>Memory notes</b>	Dual channel support. For dual channel performance, identical memory modules in each channel are necessary (minimum 2 modules).
<b>LAN</b>	10/100/1000 MBit/s Intel® 82567 LM
<b>BIOS version</b>	Phoenix 6.0
<b>BIOS features</b>	BIOS Flash EPROM update by software Recovery BIOS
<b>Audio codec</b>	Realtek ALC663
<b>Audio features</b>	Internal speaker supports audio playback, High Definition audio, 5.1 surround sound
<b>I/O CONTROLLER ON BOARD</b>	
<b>Serial ATA total</b>	4
<b>thereof eSATA</b>	2 (optional)
<b>Controller functions</b>	Serial ATA II NCQ and 3 GBit AHCI Raid 1/0
<b>INTERFACES</b>	
<b>Audio: line-in</b>	1
<b>Audio: line-in / microphone</b>	1
<b>Audio: line-out</b>	1
<b>Front audio: microphone</b>	1
<b>Front audio: headphone</b>	1
<b>USB 2.0 total</b>	12
<b>USB front</b>	2
<b>USB rear</b>	6
<b>USB internal</b>	4, thereof 2 optional rear
<b>VGA</b>	1
<b>DisplayPort</b>	1 (optional)
<b>DVI</b>	1 (optional)
<b>Serial (RS-232)</b>	1 (9pin, 16 byte FIFO, 16550 compatible)
<b>Mouse / Keyboard (PS/2)</b>	2
<b>Ethernet (RJ-45)</b>	1

**INTERFACES**

<b>Parallel</b>	1 (optional) (25pin with EPP and ECP)
<b>Interface Module notes</b>	Anytime USB charge functionality

**INPUT DEVICE / COMPONENTS**

	Optical USB tilt wheel mouse
<b>Input devices (optional)</b>	Optical USB/PS2 tilt wheel mouse

**DRIVE BAYS**

<b>Drive bays total</b>	6
<b>3.5-inch internal bays</b>	2
<b>3.5-inch external bays</b>	2
<b>5.25-inch external bays</b>	2

**SLOTS**

<b>PCI-Express 2.0 x16</b>	1 x (230 mm) FlexySlot
<b>PCI-Express x4 (mech. x8)</b>	1 x (230 mm) full height
<b>PCI (32-bit / 33 MHz)</b>	2 x (170 / 315 mm) full height

**GRAPHICS ON BOARD**

<b>Graphics brand name</b>	Intel® GMA 4500
<b>Shared video memory</b>	up to 1759 MB

<b>Refresh rate 1024 x 768 (recommended / max.)</b>	85 Hz / -
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<b>Refresh rate 1280 x 1024 (recommended / max.)</b>	85 Hz / -
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<b>Refresh rate 1600 x 1200 (recommended / max.)</b>	85 Hz / -
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<b>TFT resolution (VGA)</b>	1360 x 768 pixel 1440 x 900 pixel 1600 x 900 pixel 1680 x 1050 pixel 1920 x 1080 pixel 1920 x 1200 pixel
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<b>TFT resolution (DVI)</b>	1360 x 768 pixel 1440 x 900 pixel 1600 x 900 pixel 1680 x 1050 pixel 1920 x 1080 pixel 1920 x 1200 pixel
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<b>TFT resolution (DisplayPort)</b>	1360 x 768 pixel 1440 x 900 pixel 1600 x 900 pixel 1680 x 1050 pixel 1920 x 1080 pixel 1920 x 1200 pixel 2560 x 1440 pixel 2560 x 1600 pixel
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<b>Graphics features</b>	DirectX 10 HDCP support OpenGL® 2.0
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<b>Graphics notes</b>	Tested resolutions, depending on display type additional resolutions and frequencies possible Shared memory depending on main memory size and operating system Resolution (color depth up to 32 Bit/pixel) For TFT we recommend using 60Hz
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**ELECTRICAL VALUES**

<b>Power efficiency note</b>	power supply efficiency (at 230V; 20% / 50% / 100% load) : 85% / 87% / 85% 0-Watt mode with hard-off switch
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<b>Rated voltage range</b>	100 - 240 V
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<b>Rated frequency range</b>	50 - 60 Hz
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<b>Operating voltage range</b>	90 - 264 V
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**ELECTRICAL VALUES**

Operating line frequency range	47 - 63 Hz
Max. output of single power supply	300 W
Power factor correction/active power	active
Monitor outlet	No

**POWER CONSUMPTION**

Power consumption note	See white paper Energy Consumption 0-Watt mode with hard-off switch
Link to Energy White Paper	<a href="http://docs.ts.fujitsu.com/dl.aspx?id=c18b455f-125e-417c-b047-9baab36629be">http://docs.ts.fujitsu.com/dl.aspx?id=c18b455f-125e-417c-b047-9baab36629be</a>

**HEAT DISSIPATION**

Heat dissipation notes	See white paper Energy Consumption
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**NOISE FOR STANDARD CONFIGURATION (HDD, ODD, FDD)**

Noise emission	According to ISO9296
Related Processors for noise	Intel® Core™2 Duo E8600
Noise Operation mode 1: ODD load (Blue angel requirement)	4.3 B / 28 dB(A)
Noise Operation mode 2: HDD load (Blue angel requirement)	3.5 B / 18 dB(A)
Noise Operation mode 3: CPU 90% load (Blue angel requirement)	3.4 B / 17 dB(A)
Noise Operation mode 4: High load	3.5 B / 18 dB(A)
Noise Operation mode 5: Office applications	3.5 B / 18 dB(A)
Idle mode (Blue Angel requirement)	3.4 B / 17 dB(A)
Noise notes / description	A weighted sound power level L <sub>wad</sub> (in B) / workplace related A-weighted sound pressure level L <sub>pAm</sub> (in dB(A)), Bystander position

**DIMENSIONS / WEIGHT / ENVIRONMENTAL**

Dimensions (W x D x H)	203 x 390 x 392 mm
Operating position	Vertical
Weight	approx. 12 kg
Weight notes	Actual weight may vary depending on configuration
Operating ambient temperature	10 - 35°C

**COMPLIANCE**

Product	ESPRIMO P7936
Model	MI3W-D3012
Germany	Blauer Engel / Blue Angel GS optional
Europe	CE Nordic Swan
USA/Canada	FCC Class B cCSAus
Global	RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronic equipment) Microsoft Operating Systems (HCT / HCL entry / WHQL) ENERGY STAR® 5.0 EPEAT® Silver
Compliance link	<a href="https://sp.ts.fujitsu.com/sites/certificates/default.aspx">https://sp.ts.fujitsu.com/sites/certificates/default.aspx</a>

**ADDITIONAL SOFTWARE**

Additional software (preinstalled)	Nero Essentials S (burning software)
Additional software (optional)	Recovery DVD for Windows® Drivers & Utilities DVD (DUDVD) CyberLink Power2Go BD (playback software for Blu-ray Disc™, only with Blu-ray Disc™ drive / Blu-ray playback is not supported under Windows XP if the system runs on Intel onboard graphics) Nero 9 Essentials XL

**MISCELLANEOUS**

Thermal management  
Keyboard on (Special Fujitsu keyboard required)  
Extended lifetime

**COMPATIBILITY (REFERENCES)**

DMI 2.0  
PC 2001  
WMI 1.5  
USB 2.0  
SMBIOS

**MANAGEABILITY****Manageability features**

DeskUpdate Driver management  
PXE 2.1 Boot code  
Wake up from S5 (off mode)  
Intrusion switch (optional)  
iAMT 5.0

**Manageability type**

DeskView 10.x client management including:

**DeskView features**

On/Offline remote client management  
Detailed system inventory management and reports  
BIOS Management  
Remote power management  
System notifications  
Advanced alerts (ASF implementation)  
Security Remote Control  
DeskView Helpdesk Integration  
WoL (Wake on LAN)

**SECURITY****Physical security**

Kensington Lock support  
Eye for padlock  
Optional: Integrated cabinet lock

**System security**

Boot sector virus protection  
Write protect option for the Flash EPROM  
Embedded security (TPM 1.2)  
Control of all USB interfaces  
External USB ports can be disabled separately  
Boot protection for floppy disk / CD drive and write protection for floppy disk drive  
Control of external interfaces

**User security**

User and supervisor BIOS password  
SystemLock 2 BIOS SmartCard Security  
Hard disk password  
Optional: Access protection via external SmartCard reader  
Optional: Access protection via internal SmartCard reader

**SERVICEABILITY**

FlexySlot  
EasyFix  
EasyChange for HDD  
EasyChange for optical drives

**PACKAGING INFORMATION****Packaging dimension**

500x290x540 mm

**Max. quantity / pallet**

24

**Material - Weight (g) Carton**

1270 g

**Material - Weight (g) EPS / PS**

210 g

**Material - Weight (g) PE**

appr. 60 g

**Packaging notes**

printed user documentation is bleached in chlorine free process

**WARRANTY****Standard Warranty**

3 years

**Service level**

Bring-In / On-Site Service (depending on country)

**MAINTENANCE AND SUPPORT SERVICES - THE PERFECT EXTENSION**

WARRANTY

Recommended Service	5x9, Response Time: Next Business Day
Spare Parts availability	5 years
Service Weblink	<a href="http://ts.fujitsu.com/Supportservice">http://ts.fujitsu.com/Supportservice</a>

**FUJITSU PLATFORM SOLUTIONS**

In addition to Fujitsu ESPRIMO P7936 E-Star 5.0, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

**Dynamic Infrastructures**

With the Fujitsu Dynamic Infrastructures approach, Fujitsu offers a full portfolio of IT products, solutions and services, ranging from clients to datacenter solutions, Managed Infrastructure and Infrastructure as-a-Service. How much you benefit from Fujitsu technologies and services depends on the level of cooperation you choose. This takes IT flexibility and efficiency to the next level.

**Computing Products**

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**MORE INFORMATION**

Learn more about Fujitsu ESPRIMO P7936 E-Star 5.0, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.  
<http://ts.fujitsu.com/ESPRIMO>

**FUJITSU GREEN POLICY INNOVATION**

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment. Using our global know-how, we aim to resolve issues of environmental energy efficiency through IT. Please find further information at <http://www.fujitsu.com/global/about/environment/>

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